



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,300	03/07/2002	Ho-Jin Kweon	1567.1027	2618

49455 7590 04/13/2006

STEIN, MCEWEN & BUI, LLP  
1400 EYE STREET, NW  
SUITE 300  
WASHINGTON, DC 20005

EXAMINER
----------

ALEJANDRO, RAYMOND

ART UNIT	PAPER NUMBER
----------	--------------

1745

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Cu

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	Application No. 10/092,300	Applicant(s) KWEON ET AL.	
	Examiner Raymond Alejandro	Art Unit 1745	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 05 April 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1, 2, 5, 10, 11, 13, 38 and 39.  
Claim(s) withdrawn from consideration: 15-23, 32, 34, 35.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see next page.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

Raymond Alejandro  
Primary Examiner  
Art Unit: 1745

***Response to Arguments***

1. Applicant's arguments filed 04/05/06 have been fully considered but they are not persuasive.
2. Applicant's arguments constitute a substantial repetition of the same previously presented arguments. Thus, the examiner's response will be repeated here for the convenience of the applicant.
3. (*new response*) In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). This is to address applicant's arguments regarding the discussion of the references by itself, alone or singly.
4. The main contention of applicant's argument is premised on the assertion that "*the JP'813 discloses using aluminum hydroxide as an additive compound in an amount of 10 weight percent in the production of the positive electrode...and not in an amount at or between 0.1 weight % and 1 weight % based on the weight of the positive active material composition*". In this respect, it is particularly noted that while applicant's statement about the teachings of the JP'813 is correct, applicant has completely overlooked the essence of the rejection. In other words, applicant has conveniently ignored the statutory basis used herein to reject claims 1-2, 5, 10-11, 13 and 38-39. Applicant is respectfully reminded that the foregoing claims have been rejected under 35 USC 103(a) as being unpatentable over Amatucci et al'291 in view of the JP'813 publication. That being said, applicant is again reminded that 35 USC 103 statute permits, allows or approves the use of multiple (more than one) references to fully address the

Art Unit: 1745

claimed limitations of an invention. This is exactly what the examiner has done, so far, in order to constructively address all the limitations. Applicant has argued that *"Because there is no teaching or suggestion in JP'813 of using an additive compound in the amount recited in independent claims 1 and 10, it would not have been obvious to one of ordinary skill in the art to combine Amatucci with JP'813"*. However, applicant has been clearly and repeatedly instructed by the examiner that the primary reference (i.e. Amatucci) discloses all the claimed limitations except the specific additive compound, that is to say, only the additive compound is not taught in Amatucci, not its respective weight amount. As just mentioned above, Amatucci discloses the use of additive compounds which can added in an amount ranging from 0.4 to 1.0 % by weight (EXAMPLES 1-3). In particular, **EXAMPLE 3** shows the addition of 0.4 % of an additive powder (EXAMPLE 3) (**← emphasis added**). Stated somewhat differently, the primary reference does fully, completely and fairly address the limitation concerning the specific additive amount but it does not disclose the specific additive compound. And, to remedy such a deficiency the secondary reference (the JP'813) has been introduced or cited because the JP'813 does suggest an active material comprising a lithiated compound and aluminum hydroxide together or collectively. As such, a 35 USC 103 rejection combining these two references was issued. Nothing more, nothing less. Accordingly, the examiner verily believes that his 103 rejection is an appropriate and genuine action as a strong prima-facie case of obviousness has been fairly presented to the applicant.

5. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching,

Art Unit: 1745

suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). *In this case, the two references are found to be pertinent to each other as well as to the field of applicant's endeavor because the two references encompass positive electrode material including a lithiated compound and an additional component (additive). Thus, the chemical environment or chemistry of two references' active material is so similar and compatible that one of ordinary skill in the art would necessarily end up looking at both references, singly or collectively, in order to address the limitations of the claimed positive active material. Thus, the very similar and compatible chemical environment or chemistry and field of endeavor of Amatucci et al and the JP '813 would suggest the desirability of their combination.*

6. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

*The following responses to applicant's arguments have been presented in previous office actions and are herein repeated to further address applicant's arguments and maintained for the reasons of record:*

Art Unit: 1745

7. The main contention of applicant's arguments is premised on the assertion that the primary reference "*fails to teach or suggest an amorphous additive compound*" (See amendment of 08/12/05 at page 9, 5<sup>th</sup> full paragraph) because "*Amatucci discloses using a film for coating...wherein the suitable materials for such coating film are either in a crystalline or glassy form, such as borates or aluminates (column 4, lines 9-15)*" (See amendment of 08/12/05 at page 9, 3<sup>rd</sup> full paragraph). First of all, the examiner likes to point out that applicants have admitted that the prior art of record does use glassy form materials for coating. In this regard, applicants are then respectfully requested to double check and review their assertion, and thus, re-evaluate and reconsider their position because those of ordinary skill in the art know that a glassy material (glass) stands for any of various amorphous materials formed from a melt by cooling to rigidity without crystallization (Refer to *Merriam-Webster's, Collegiate Dictionary, 10<sup>th</sup> Edition*). Thus, a glassy material does not crystallize, thereby, it does not possess a crystalline structure. Simply put, glassy materials are amorphous materials. Hence, applicant's arguments with respect to the lack of an amorphous additive compound are in error and completely inapposite.

8. Since applicants have overcome the 35 USC 102 rejection, the examiner will only address applicants' arguments concerning the 35 USC 103 rejection. In this regard, the principal contention of applicant's arguments is premised on the assertion that the prior art of record fails to reveal the specific amount (weight percent) of additive compound in the positive electrode. However, this assertion is not sufficient to overcome the rejection because the prior art (i.e. Amatucci et al'291 and the JP'813 publication) in combination does disclose the use of additive compound within the claimed range. Indeed, applicants' attention is particularly directed to EXAMPLES 1-3 in the Amatucci et al reference. Those examples clearly show using the

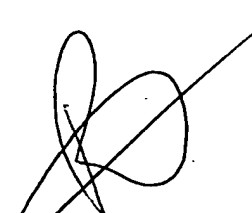
Art Unit: 1745

specific claimed amount of additive compound in the positive electrode. Applicant is reminded that the test for obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Therefore, in view of the foregoing teachings, the examiner believes that it is fairly reasonable to contend that those of ordinary skill in the art would have sufficient sophistication to recognize that the specific additive compound of the JP'813 publication may be added by using exactly the same amount/percent as disclosed in Amatucci et al'291. Simply put, given that Amatucci et al'291 evidently teaches the use of an additive compound within the claimed range, the skilled artisan will only need to substitute the JP'813 publication additive in the positive electrode of Amatucci et al'291. Stated somewhat differently, not because Amatucci et al'291 fail to disclose the specific additive compound (the material) per se, it means that the additive compound of the JP'813 publication cannot be added in the same manner and amount as Amatucci et al'291 instruct to add their additive compounds, that is to say, nothing in the Amatucci et al'291 reference precludes the use of other additive compounds, in particular, the additive compounds of the JP'813 publication. *Thus, in the event that applicants eventually argue that the examiner's position is improper, applicant is now advised that showing of objective evidence would be necessary to demonstrate that the use of the additive compound of the JP'813 publication, when used as taught (i.e. in the same amount/proportion) in Amatucci et al'291, would cause detrimental or deleterious damage(s) to the positive active material of Amatucci et al'291. Therefore, the burden would be shifted to the applicants to provide such objective evidence.*

Art Unit: 1745

9. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.



RAYMOND ALEJANDRO  
PRIMARY EXAMINER